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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,422	06/25/2004	Nobuyoshi Yoshimura	2001JP502 (EM-05-19)	9303
40256	7590	01/26/2007		
FERRELLS, PLLC P. O. BOX 312 CLIFTON, VA 20124-1706			EXAMINER EGWIM, KELECHI CHIDI	
			ART UNIT	PAPER NUMBER
			1713	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/500,422

Applicant(s)

YOSHIMURA ET AL.

Examiner

Dr. Kelechi C. Egwim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 12-14 and 16-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10, 11, 15 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>021605 & 110205</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group III, claims 10, 11 and 15 in the reply filed on 11/03/2006 is acknowledged. The traversal is on the ground(s) that "[a]s is evident in subparagraph (ii) of the guidelines, a restriction may be proper between (a) one independent claim which lacks contribution over the art, and (b) one independent claim which positively contributes over the prior art." This is not persuasive for reason already stated in the written restriction. As evidenced below, the synthetic resin emulsion does NOT contribute over the prior art.

Applicant also argues that "even assuming arguendo, that the synthetic resin emulsion (which all claims have in common) does not contribute over the art, a restriction would still be improper because all the claims incorporate that feature in any event." However, applicant is misreading the statute. If the common feature does not contribute to the prior art, it is not a "special" technical feature, and thus, there is no "special technical feature" linking the different groups and there is no unity of invention.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-9, 12-14 and 16-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10, 11 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 10, from which claims 11 and 15 depend, in line 12 recites the limitation "said monomer mixture". However, since the process involves at least two different monomer mixtures (i.e., one for the core and one for the shell), it is unclear to which monomer mixture the limitation following the recitation is referring. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 10, 11, 15 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Kiehlbauch et al. (USPN 5,081,166)

In col. 3, line 59 to col. 4, line 14, Kiehlbauch et al. teach a process for producing a synthetic core/shell resin emulsion comprising the steps of:

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polymerizing a monomer mixture including an unsaturated carboxylic acid monomer and a hydrophilic comonomer in an aqueous medium to produce the shell copolymer, and

combining monomers for the core, exemplified by acrylate, lower methacrylate and including up to 10 mol% of functional monomers (col. 9, lines 56-58), with the aqueous medium, and emulsion polymerizing the reaction mixture, wherein the shell polymer may be neutralized by addition of a pH adjusting agent prior to and/or during polymerization of the core (col. 10, lines 4-8),

to provide a synthetic resin emulsion having a core/shell structure.

Thus, the requirements for rejection under 35 U.S.C. 102(b) are met.

8. Claims 10, 11, 15 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Brodnyan et al. (EP 555 959)

In page 4, lines 12-20, Brodnyan et al. teach an inverse polymerization process for producing a synthetic core/shell resin emulsion comprising the steps of:

polymerizing a monomer mixture including an unsaturated carboxylic acid monomer and a hydrophilic comonomer in an aqueous medium to produce the alkali soluble shell, and

combining monomers for the alkali insoluble core, including functional monomers, with the aqueous medium, and emulsion polymerizing the reaction mixture, wherein the first stage acid containing alkali soluble shell copolymer (referred to in the reference as the "second stage polymer, even though it is produced first in the

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alternative inverse polymerization process) may be neutralized by a base (page 5, lines 22-30),

to provide a synthetic resin emulsion having a core/shell structure, wherein the alkali insoluble core polymer has a Tg from about -45 °C to about 30 °C (page 4, lines 48-50).

Thus, the requirements for rejection under 35 U.S.C. 102(b) are met.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kelechi C. Egwim whose telephone number is (571) 272-1099. The examiner can normally be reached on M-T (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KELECHI C. EGWIM PH.D.
PRIMARY EXAMINER

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